

**AV-8B AIRCRAFT OPERATIONAL FLIGHT TRAINER , DEVICE 2F133****TRAINING CATEGORY:**

AVIATION (Operational Flight/Weapon Systems)

ORIGINATING AGENCY:

DCNO/AIR

SECURITY CLASSIFICATION:

Device 2F133 is secret.

PURPOSE:

Develop pilot proficiency in AV-8B aircraft nontactical operations.

INTENDED USE:

The OFT is used to train student pilots in AV-8B operational flight procedures. Procedures include: V/STOL and conventional takeoff and landings, aircraft control, instrument flight procedures, and normal/degraded/emergency operations. This training prepares student pilots for flights in the AV-8B aircraft and advanced training in Weapons Tactics Training Device 2F134.

FUNCTIONAL DESCRIPTION:

The OFT is installed in a multiroom training facility with a high bay area. The OFT is grouped and located in adjacent rooms which include: Trainee Station, Instructor Operator Station, Computer Room, Debrief Room, and Utility Room.

The trainee station includes a full size replica of the AV-8B crew station and a visual scene projection system. The crew station contains controls, indicators, and cockpit equipment required to perform the training mission. A flight control system simulates AV-8B flight control characteristics. A G-suit, G-seat, and buffet system simulates G-forces and motion cuing. An aural simulation system simulates the AV-8B crew station aural environment. A communications system simulates all COM/NAV capabilities.

Computer image generation (CIG) equipment develops imagery video for the trainer dynamic visual scenes. The computer generated visual scenes simulate a 400 by 400 nautical mile area. The dynamic visual scenes include land and sea based visual environments with special effects.

DIRECTORY OF NAVAL TRAINING DEVICES

The instructor operator station (IOS) is the trainer control center. The IOS provides the capability to select, initiate, and record the training mission and to monitor and evaluate trainee performance. Basic training modes include planning, training, demonstration, and replay. Demonstration, instant replay, and simulation freeze operations are provided to emphasize a particular situation during the training mission.

PHYSICAL INFORMATION:

Trainee Station Room - 40' H x 51' W x 54' L

Computer Room - 10' H x 30' W x 54' L

Instructor Operator Station - 10' H x 20' W x 32' L

Utility Room - 10' H x 12' W x 28' L

Debrief Room - 10' H x 20' W x 22' L

Total Floor Area - 5,790 Sq. Ft.

POWER REQUIREMENTS:

120/208, 5 wire, 60 Hz, 3-phase, 600 Amperes per phase maximum.

PUBLICATIONS FURNISHED:

1. Maintenance Instructions, AV-8B OFT Device 2F133, NAVTRADEV P-6044, (U)
2. Maintenance Requirement Cards, AV-8B OFT Device 2F133, NAVTRADEV P-6045 (U)
3. Instructors Handbook, AV-8B OFT Device 2F133, NAVTRADEV P-6047 (U)

PERSONNEL:

Instructor - One (1) instructor pilot qualified in AV-8B operational flight training procedures.

Operator - One (1) MARCOR civilian to assist the instructor pilot.

Trainee - One (1) student pilot

Maintenance Personnel - Five (5) MARCOR civilian personnel

CONTRACT IDENTIFICATION:

Manufactured by McDonnell Aircraft Co., St., Louis, MO under NAVTRASYSCEN Contract No. N61339-82-C-0022.

LOCAL STOCK NUMBER:

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